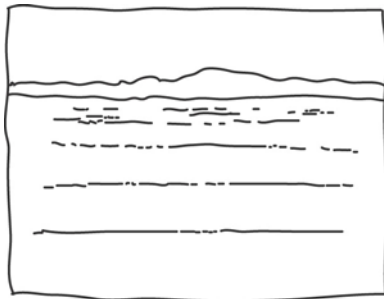


## Designing Craters: Creating a Deep Impact

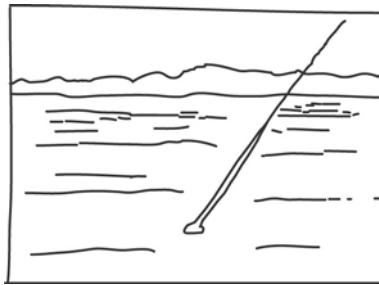
# Cratering in the Solar System

### STUDENT HANDOUT

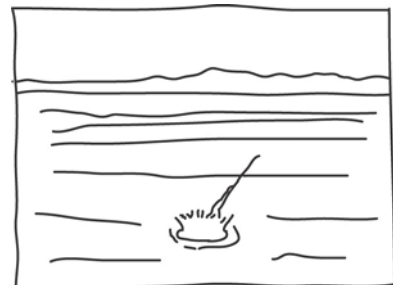
Use the collection of images provided by your teacher and the drawings below to answer the following questions. You may want to view [Pumice Impact Test \(Side View\) Animation](#) – a high-speed image sequence viewed from the side of a high velocity impact test into a highly porous target of compressed, fine dust particles.



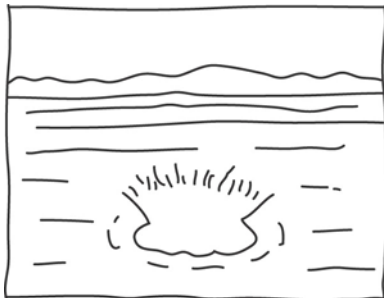
1.



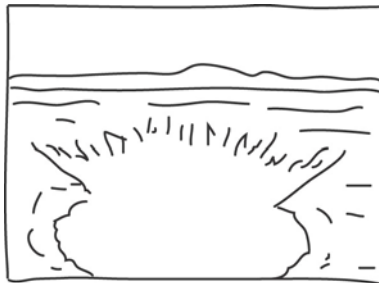
2.



3.



4.



5.



6.



7.

1. Look at the collection of cratering images provided by your teacher. Compare them to the cratering experiments you conducted. What differences do you notice? How do you account for the differences?

Drawings by Nick Walker

2. Why do you think the craters in these pictures are mostly round? Was this the case with the craters created in class? If not, explain why the shapes may have differed?

3. In your classroom experiments, how was the diameter of the impactor related to the diameter of the crater? In the Solar System, there are craters that are much greater diameter than the original body that created it. Why?

3. What similarities are there between the craters you created in the classroom and craters in the images?